

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 23 AUG 2001

PCT

Applicant's or agent's file reference 2310271/MRO/CN	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).
International Application No. PCT/AU00/00799	International Filing Date (<i>day/month/year</i>) 30 June 2000	Priority Date (<i>day/month/year</i>) 1 July 1999
International Patent Classification (IPC) or national classification and IPC Int. Cl.⁷ C07K 14/72, C12N 15/12, C07H 21/04		
Applicant COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION et al		

1.	This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.																
2.	<p>This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 19 sheet(s).</p>																
3.	<p>This report contains indications relating to the following items:</p> <table border="0"> <tr> <td>I</td> <td><input checked="" type="checkbox"/> Basis of the report</td> </tr> <tr> <td>II</td> <td><input type="checkbox"/> Priority</td> </tr> <tr> <td>III</td> <td><input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td>IV</td> <td><input type="checkbox"/> Lack of unity of invention</td> </tr> <tr> <td>V</td> <td><input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td>VI</td> <td><input checked="" type="checkbox"/> Certain documents cited</td> </tr> <tr> <td>VII</td> <td><input type="checkbox"/> Certain defects in the international application</td> </tr> <tr> <td>VIII</td> <td><input checked="" type="checkbox"/> Certain observations on the international application</td> </tr> </table>	I	<input checked="" type="checkbox"/> Basis of the report	II	<input type="checkbox"/> Priority	III	<input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	IV	<input type="checkbox"/> Lack of unity of invention	V	<input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	VI	<input checked="" type="checkbox"/> Certain documents cited	VII	<input type="checkbox"/> Certain defects in the international application	VIII	<input checked="" type="checkbox"/> Certain observations on the international application
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Date of submission of the demand 30 January 2001	Date of completion of the report 14 August 2001
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer ALISTAIR BESTOW Telephone No. (02) 6283 2450

I. Basis of the report**1. With regard to the elements of the international application:***

- ☐ the international application as originally filed.
- ☒ the description, pages **1 - 89**, as originally filed,
pages , filed with the demand,
pages , received on with the letter of
- ☒ the claims, pages , as originally filed,
pages , as amended (together with any statement) under Article 19,
pages , filed with the demand,
pages **90 - 108**, received on **14 May 2001** with the letter of **13 May 2001**
- ☒ the drawings, pages **1/8 - 8/8**, as originally filed,
pages , filed with the demand,
pages , received on with the letter of
- ☒ the sequence listing part of the description:
pages **1 - 57**, as originally filed
pages , filed with the demand
pages , received on with the letter of

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☒ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/fig.

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be nonobvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos: 70

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for said claim Nos. 70

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 1 - 69, 71 - 74	YES
	Claims	NO
Inventive step (IS)	Claims 1 - 69, 71 - 74	YES
	Claims	NO
Industrial applicability (IA)	Claims 1 - 69, 71 - 74	YES
	Claims	NO

2. Citations and explanations (Rule 70.7)

(D1) SWISS-PROT Accession no. 018531, 15 December 1998, Hannan G. N., Hill R. J.

(D2) SWISS-PROT Accession no. P34021, 1 February 1994, Koelle M. R., *et.al*

(D3) GenPept Accession no. CAA36827, 1990, Henrich, V. C.

(D4) GenPept Accession no. CAA72296, 1997, Mouillet J. F. *et.al*

(D5) SWISS-PROT Accession no. P20153; Q9W535, 1 February 1991, Oro A. E., *et.al*

(D6) GenPept Accession no. AAD19828, 1998, Saleh D. S. *et.al*

(D7) GenPept Accession no. AAB94565, 1997, Guo X., *et.al*

(D8) GenPept Accession no. AAB94566, 1997, Guo X., *et.al*

(D9) GenPept Accession no. AAC95154, 13 October 1998, Vaillancourt, P. *et.al*.

(D10) GenPept Accession no. AAC59722, 1995, Jones B. B. *et.al*.

(D11) SWISS-PROT Accession no P28700, 1 December 1992, Leid M. *et.al*.

(D12) SWISS-PROT Accession no P19793, 1 February 1991, Manglesdorf D.J., *et. al*.

(D13) GenPept Accession no AAC59721, 1995, Jones B. B., *et.al*.

(D14) WO, A, 98/35550 (NEW ZEALAND PASTORAL AGRICULTURE RESEARCH INSTITUTE LIMITED and THE NEW ZEALAND WOOL BOARD) 20 August 1998

(D15) WO, A, 91/13167 (THE BOARD OF TRUSTEES OF LELAND STANFORD Jnr. UNIVERSITY) 18 September 1991

NOVELY (N) AND INVENTIVE STEP (IS)

None of the citations D1 to D15 disclose the subject of claims 1 - 69 or 71 - 74, and therefore the subject matter is novel. None of the claimed matter is obvious in the light of any one of the citations, and therefore the claimed matter is inventive.

INDUSTRIAL APPLICABILITY (IA)

The claimed subject matter is suitable for industrial application.

VI. Certain documents cited

1. Certain published documents (Rule 70.10)

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
P,X WO 99/36520	22 July 1999	15 January 1999	15 January 1998
P,X US 6025483	15 February 2000	5 June 1996	5 June 1996
P,X WO 99/48915	30 September 1999	26 March 1999	27 March 1998

None of the above citations disclose the subject matter of claims 1 - 69 or 71 - 74

2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day/month/year)	Date of written disclosure referring to non- written disclosure (day/month/year)
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VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The subject matter of claim 70 is not fully supported by the description. The claim to all compounds which interact with the three dimensional structure of certain polypeptides, has little, if any support in the description and appears to be no more than speculation

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU00/00799

A. CLASSIFICATION OF SUBJECT MATTERInt. Cl. ⁷: C07K 14/72, C12N 15/12, C07H 21/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

AS ABOVE

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

AS BELOW

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Gen-Pept; SWISS-PROT; PIR; TREMBL : Sequence ID Nos. 2, 4, 6, 8, 10, 14, 16, 18, 20, 40

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SWISS-PROT Accession no. 018531, 15 December 1998, Hannan G. N., Hill R. J.	1-5,9,10,15-21,27-40,44 Seq. ID 2
X	SWISS-PROT Accession no. P34021, 1 February 1994, Koelle M. R., <i>et.al.</i>	1-5,9,10,15-21,27-40,44 Seq. ID 2
X	GenPept Accession no. CAA36827, 1990, Henrich, V. C.	1-5,9,11,15-22,27-40,44 Seq ID 4,6,8

☒ Further documents are listed in the continuation of Box C
 ☒ See patent family annex

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

3 August 2000

Date of mailing of the international search report

25 AUG 2000

Name and mailing address of the ISA/AU

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU00/00799

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GenPept Accession no. CAA72296, 1997, Mouillet J. F. <i>et.al.</i>	1-7,19,20, 23, 27-40,44 Seq ID 10,14
X	SWISS-PROT Accession no. P20153; Q9W535, 1 February 1991, Oro A. E., <i>et.al.</i>	1-5,9,11,15- 22,27-40,44 Seq ID 4,6,8
X	GenPept Accession no. AAD19828, 1998, Saleh D. S. <i>et.al.</i>	1-7,19,20, 23, 27-40,44 Seq ID 10,14
X	GenPept Accession no. AAB94565, 1997, Guo X., <i>et.al.</i>	1-7,19,20, 23, 27-40,44 Seq ID 10
X	GenPept Accession no. AAB94566, 1997, Guo X., <i>et.al.</i>	1-7,19,20, 23, 27-40,44 Seq ID 10,14
X	GenPept Accession no. AAC95154, 13 October 1998, Vaillancourt, P. <i>et.al.</i>	1-7,19,20, 23,27-40,44 Seq ID 16,18,20
X	GenPept Accession no. AAC59722, 1995, Jones B. B. <i>et.al.</i>	1,2,15-20,27- 40,44 Seq ID 40
X	SWISS-PROT Accession no P28700, 1 December 1992, Leid M. <i>et.al.</i>	1-7,19,20, 23,27-40,44 Seq ID 16,18,20,40
X	SWISS-PROT Accession no P19793, 1 February 1991, Manglesdorf D.J., <i>et. al.</i>	1-7,19,20, 23,27-40,44 Seq ID 16,18,20,40
X	GenPept Accession no AAC59721, 1995, Jones B. B., <i>et.al.</i>	1-7,19,20, 23,27-40,44 Seq ID 20,40
P,X	WO, A, 99/36520 (COMMONWEALTH AND SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION.) 22 July 1999	1-5,9,11,15- 22,27-40,44 Seq. 2,4,6,8,10

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU00/00799

C (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO, A, 98/35550 (NEW ZEALAND PASTORAL AGRICULTURE RESEARCH INSTITUTE LIMITED and THE NEW ZEALAND WOOL BOARD) 20 August 1998	1-5,9,11,15-22,27-40,44 Seq ID 2,4,6
P,X	US, A, 6025483 (THE REGENTS OF THE UNIVERSITY OF CALIFORNIA) 15 February 2000 -	1-5,9,11,15-22,27-40,44 Seq ID 6
X	WO, A, 91/13167 (THE BOARD OF TRUSTEES OF LELAND STANFORD Jnr. UNIVERSITY) 18 September 1991 -	1-5,9,11,15-22,27-40,44 Seq ID 4
P,X	WO, A, 99/48915 (GLAXO GROUP LIMITED) 18 October 1999 -	1-7,19,20,23,27-40,44 Seq ID 16

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU00/00799

Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos :
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos : 41 - 43
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically: The method claims are not restricted to the use of the steroid receptors of the invention. The compound claim is characterised in terms of a structure governed by the interaction with a receptor or a fragment thereof, such a receptor not being restricted to that of the invention. This is unsearchable.
3. ☐ Claims Nos :
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/AU00/00799

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Family Member							
WO	9948915	AU	32116/99				
WO	9113167	AU	74922/91	AU	17792/95	AU	49218/97
		CA	2076386	EP	517805	US	5514578
US	6025483	NONE					
WO	9835550	AU	60077/98				
WO	9936520	AU	21429/99				
END OF ANNEX							